

ARTÍCULO ORIGINAL

Spanish adaptation of The Penn State College of Medicine Scale to assess professionalism in medical students

Eliseo Bustamante¹, Álvaro Sanabria^{1,2,3}

¹ Departamento de Cirugía, Facultad de Medicina, Universidad de La Sabana, Chía, Colombia

² Departamento de Cirugía, Facultad de Medicina, Universidad de Antioquia

³ Unidad de Oncología, Hospital Pablo Tobón Uribe, Medellín, Colombia

Introduction: Professionalism is a subject of interest in medical schools around the world. The use of a questionnaire could be useful to assess professionalism in Colombia.

Objective: To adapt The Penn State University College of Medicine Professionalism Questionnaire as a culturally valid instrument in the Spanish language.

Materials and methods: We followed recommendations from the IQOLA project and used forward and back translation with four independent translations, as well as a pilot evaluation and an evaluation of psychometric features with 250 students. We evaluated item-scale correlations and internal consistency with Chronbach's alpha test and conducted a principal components factor analysis.

Results: Global Cronbach's alpha was 0.86, the Kaiser-Meyer-Olkin measure of sampling adequacy was 0.83, and Bartlett's test of sphericity had a $p>0.00001$. We found six factors that explained 93% of the total variance and four new factors emerged in the factor analysis, while eight items had high uniqueness.

Conclusion: The Penn State University College of Medicine Scale measures professionalism attitudes in medical students with good reliability. However, the structure of the scale demonstrated differences when used in the Latin American medical student population.

Keywords: Ethics, professional; professional competence, validation studies, translations, leadership

doi: <http://dx.doi.org/10.7705/biomedica.v34i2.1807>

Adaptación al idioma español de la escala del *Penn State College of Medicine* para medición del profesionalismo en estudiantes de medicina

Introducción. El profesionalismo es un área de interés en las facultades de medicina del mundo. El uso de un cuestionario puede ser útil para evaluar el profesionalismo en Colombia.

Objetivo. Adaptar la escala de profesionalismo para estudiantes de medicina del *Penn State University College of Medicine* al idioma español como instrumento válido para evaluarlo.

Materiales y métodos. Se siguieron las guías para adaptación de instrumentos del proyecto IQOLA, realizando traducción y traducción inversa, así como una prueba piloto y una evaluación de las características psicométricas en 250 estudiantes. Se evaluó la correlación entre ítems y escala y la validez interna con el alfa de Chronbach y se hizo un análisis factorial de componentes principales.

Resultados. El alfa de Cronbach global fue de 0,86, la medida de Kaiser-Meyer-Olkin fue de 0,83 y el test de esfericidad de Bartlett tuvo un valor de $p>0,00001$. Se encontraron seis factores que explicaron 93 % de la varianza total y cuatro nuevos factores que emergieron del análisis factorial. Ocho ítems tuvieron alta singularidad.

Conclusión. La escala del *Penn State University College of Medicine* mide con buen nivel de confiabilidad las actitudes hacia el profesionalismo en los estudiantes de medicina. No obstante, la estructura de la escala mostró diferencias al ser validada en estudiantes latinoamericanos.

Palabras clave: ética profesional, competencia profesional, estudios de validación, traducciones, liderazgo.

doi: <http://dx.doi.org/10.7705/biomedica.v34i2.1807>

Author contributions:

Both authors participated in the formulation of the research question, and in the design, analysis, interpretation, and writing of the manuscript.

Well-rounded development of university students is a primary factor in achieving citizenship and successful professional careers. This process is especially relevant when it comes to medical students, as they will ultimately be responsible for the health and life of other human beings (1). Therefore, medical school education should focus on training professionals who are prepared to maintain health, relieve suffering, cure diseases, avoid unnecessary loss of lives and offer a dignified death (2). According to Wojtczak,

"Medicine is a moral enterprise, a profession whose members are adhered to a set of such timeless principles as respect for others, empathy, compassion, honesty and integrity, altruism and professional excellence".

These principles are the foundation of medical professionalism and the root of the social contract between medicine and society (3).

Medical schools have traditionally focused on knowledge transmission and skill development, with little interest in the development of ethical, social, cultural or humanistic factors, which are necessary to develop medical professionalism. The "Professionalism project" from the American Board of Medicine reported an increase in students' technical skills during medical school and a decrease in their professional behavior. In reality, physicians are often faced with dilemmas between their medical ideals and a healthcare system wrought with ethical and economic challenges. Therefore, genuine professionalism is seen as the only alternative to protect medicine as a profession (1,4).

There is general agreement regarding the concept of professionalism. Swick, *et al.*, (5,6) described professionalism as encompassing the following four features: subordination of one's self-interest, adherence to high ethical and moral standards, responsiveness to societal needs and demonstration of core humanistic values. The American Board of Internal Medicine (ABIM) (7) defined professionalism with the following six elements: altruism, accountability, excellence, duty, honor and integrity, and respect for others. However, defining the elements that encompass professionalism is

subjective and non-systematic, and there is a lack of agreement about how to measure professionalism. Therefore, the lack of objective instruments to evaluate professionalism impedes the development and assessment of educational strategies aimed at fostering professionalism in medical schools.

There are currently no effective instruments to measure and identify students with low levels of professionalism, and therefore, no follow-up can be pursued to identify their course of improvement throughout their training (8). To overcome this barrier, Blackall, *et al.*, (9) developed The Penn State University College of Medicine (PSCOM) Professionalism Questionnaire in 2007. This scale was developed using high methodological standards and was validated among 765 medical personnel and 392 medical students showing high validity and high reliability. The questionnaire is composed of six groups of questions in the following domains: accountability, altruism, duty, excellence, honesty and integrity, and respect. Each group contains six sentences to assess the attitudes of medical students regarding professionalism. These sentences were organized according to a consensus within each group.

As professionalism is a subject of interest in medical schools around the world, the use of a questionnaire such as the PSCOM scale could be useful to assess professionalism internationally. However, because the instrument evaluates subjective variables, it cannot be directly translated to other languages due to cultural factors and differences in jargon. We were unable to find an instrument to assess professionalism in medical students in the Spanish language; therefore, we hypothesized that the PSCOM questionnaire might be used to measure professionalism in medical students from Latin America. Thus, we checked whether the instrument could be validated for this population.

The aim of this study was to provide a cultural adaptation of the PSCOM Professionalism Questionnaire to Latin American Spanish and a psychometric validation to assess its psychometric characteristics.

Material and methods

This project was approved by the Research Ethics Committee of the *Universidad de La Sabana* and was given written authorization for using the instrument by George Blackall, Psy. D, MBA. The study conformed to the recommendations from the IQOLA project and consisted of the following: forward and back independent translations; combination

Corresponding author:

Álvaro Sanabria, Departamento de Cirugía, Facultad de Medicina, Universidad de La Sabana, Campus Puente del Común, Km 21 Autopista Norte, Chía, Colombia
Tel-fax: (571) 861 5555
alvarosanabria@unisabana.edu.co

Recibido: 05/09/13; aceptado: 15/03/14

of final versions; review by the author of the instrument; pilot evaluation, and finally, evaluation of psychometric features (evaluation of item and scale-level descriptive statistics, examination of the equality of item-scale correlations, item internal consistency and item discriminant validity, and estimation of scale score reliability using internal consistency and test-retest methods).

Forward and back translation

Two independent and certified Spanish-native translators produced the forward translation, and two independent and certified English-native translators completed the back translation. One translator in each group was informed of the objectives of the study. The initial Spanish versions were combined into one version, with the participation of the translators and researchers, before completing the back translation. The same process was followed for the English versions before submitting the translations for author review. Disagreements were resolved by consensus. The final English version was reviewed by the author of the scale and translated into Spanish to be used as the standard instrument.

Pilot evaluation

We identified 15 students of different academic levels at the medical school to assess the readability, comprehensibility and graphical order of the instrument. We also tracked the time for completion.

Validation

To assess the psychometric characteristics of the instrument, we used a sample size of 300 students, an alpha error of 0.05 and a confidence interval of 10% around a Pearson correlation coefficient of 0.8 (Tamamu software®, Pontificia Universidad Javeriana, Bogotá, Colombia). This sample size also met the "rule of thumb" of using five or more observations for each variable. We assessed each item and scale-level descriptive statistics using simple frequencies. We also evaluated item-scale correlations with the Pearson correlation coefficient and internal consistency with Chronbach's alpha test. Finally, because of ethical concerns related to the confidentiality of the responses, we did not assess test-retest consistency.

For construct validity, we used a principal components exploratory factor analysis with and without Varimax rotation, which was chosen because the scale is new, its psychometric validity has only been evaluated in the original study made by Blackall, there are no other studies exploring the validity of

the instrument and the first attempt of validation showed that the theoretical model proposed by the American Board of Internal Medicine (ABIM) did not agree with the concepts emerging from the students evaluation. All these factors impede the use of a confirmatory factor analysis, proposed by some authors, which requires an *a priori* hypothesis for its use (10). We utilized the Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy to determine if the instrument was suitable for a factor analysis and Bartlett's test of sphericity to assess the identity of the correlation matrix.

Results

After forward and back translations, the final English version was sent to George Blackall, who made language corrections that did not modify the meaning of the questions. This final version was translated into Spanish and used as the standard instrument (annex 1).

The pilot evaluation revealed some errors in the instructions for completing the questionnaire, and some variables were introduced to specify the population under study. These variables did not relate directly to the questionnaire. The pilot population also recommended some changes in the graphical design of the instrument. There were no modifications to the language structure of the questionnaire as a result of the pilot test. The average time calculated for completion was 11 minutes.

For the validation phase, we extended an invitation for voluntary participation to all students older than 18 years enrolled from the second to the eleventh semester at the medical school. The questionnaire was self-administered. We received 286 questionnaires and excluded 36 (13%) because of incomplete information, resulting in 250 completed questionnaires for the study.

Population

In total, 186 (74.4%) students were female with a mean age of 20.2 ± 2.3 years (range 18-26); 246 were unmarried (99%), while 142 (57%) were in the first semesters of their training and had not yet had contact with patients. Moreover, 220 (88%) students resided in urban areas, 206 (82%) were members of households with at least four people, 165 (66%) belonged to middle income families and 94 (38%) were caretakers of another family member in their home (mother, brothers or sons). Finally, 163 (65%) students had married parents, and 239 (95%) were financially supported by their parents or had bank credits.

Descriptive results from the items

Table 1 shows the results of responses to each factor and their respective items.

Psychometric analysis

Global Cronbach's alpha was 0.86, showing high internal consistency and reliability. Table 2 shows the Cronbach's alpha for each original factor. The Kaiser-Meyer-Olkin (KMO) measure for sampling adequacy was 0.83, and Bartlett's test of sphericity had a $p > 0.00001$. Using the Kaiser criteria, the correlation matrix showed only three factors with an Eigen value greater than 1, which explained 76.5% of the total variance, while the six first factors explained 93% of the total variance. The Varimax rotation generated the most meaningful solution, with the emergence of four factors with different item content from the original instrument (table 3). Items

from all the original factors presented in the PSCOM questionnaire appeared at this stage (three questions from groups 6, 5, 3, 2 and 1 and four from group 4), but the distribution was different from the original instrument. We also found eight variables with a high uniqueness (5-6 [empathy]), 4-6 [self-assessment], 4-1[compassion], 2-5 [participation in academic meetings], 2-3 [respect for code of conduct], 1-6 [unfair criticism], 1-4 [self-improvement], 1-2 [patient/physician relationship]) in the Varimax rotation.

Discussion

Professionalism is the sum of a group of values, conducts and relationships that support the public trust in medicine and physicians. The quality of healthcare rests on the attitudes and the conduct of health personnel (11), making professionalism a cornerstone for guaranteeing better health services.

Table 1. Frequency of answers and order of items by factor

Factor	Item	Never	Little	Some	Much	Great deal	Final order
1	1	2	6	53	128	61	4
	2	20	1	3	14	212	6
	3	1	25	82	115	27	1
	4	2	1	8	56	183	5
	5	0	2	11	103	134	3
	6	1	2	33	88	126	2
2	1	1	4	40	138	67	4
	2	3	21	52	111	63	2
	3	1	1	9	49	190	6
	4	1	1	14	89	145	5
	5	9	35	81	95	30	1
	6	3	2	23	90	132	3
3	1	28	41	77	66	38	1
	2	44	16	6	41	143	4
	3	0	1	36	83	130	5
	4	0	1	6	66	177	6
	5	0	0	5	74	171	3
	6	6	22	56	95	71	2
4	1	5	9	44	76	116	3
	2	1	4	35	138	72	2
	3	2	2	23	81	142	5
	4	4	2	15	81	148	6
	5	5	11	46	112	76	1
	6	0	6	31	80	133	4
5	1	4	3	19	86	138	6
	2	3	3	36	100	108	3
	3	10	21	47	77	95	1
	4	0	0	5	71	174	5
	5	3	3	12	94	137	2
	6	2	0	17	75	156	4
6	1	3	4	13	80	150	6
	2	13	28	51	119	39	1
	3	1	3	8	55	183	3
	4	0	2	21	107	120	4
	5	6	2	34	94	114	2
	6	0	0	2	41	207	5

Table 2. Cronbach's alpha for factors from original questionnaire

Factor 1	0.40
Factor 2	0.55
Factor 3	0.47
Factor 4	0.57
Factor 5	0.67
Factor 6	0.55

Table 3. Items and factors generated from the Varimax rotation

Factor	Item*	Cronbach's alpha
1	6-5	0.82
	5-2	
	5-1	
	4-5	
	4-4	
	2-6	
	5-5	
2	5-3	
	6-6	0.65
	5-4	
	3-4	
	1-5	
3	6-2	0.72
	4-2	
	3-6	
	3-1	
	2-2	
	2-1	
	1-3	
4	4-3	0.21
	1-1	

*Place in the original questionnaire (group number)

In 2007, Young, *et al.* (12), identified the need to introduce elements of professionalism in medical student training as a way to offer principles, values and tools to face the ethical conflicts between medical students' ideals and a health system full of ethical and economic challenges. The Professionalism Project revealed that there was a loss of professional behavior in medical students as their years of training advanced. The curricula of most medical schools have developed under the assumption that students will inherently exhibit appropriate professional behavior upon completing their training. If they do not, they may become vulnerable to potential professional threats.

Given that professionalism is a complex and heterogeneous concept with an unclear definition, it is difficult to know how and when to introduce elements of professionalism in the medical school curriculum (13). Because instruments to measure professionalism for Spanish speaking students are not available, intervention strategies cannot be formally tracked. Also, there are no objective

instruments to monitor students with professional behavior weaknesses, making comparisons between teaching strategies difficult and impeding the measurement of the impact of these interventional changes on clinical settings.

The PSCOM scale was the first instrument designed with stringent methodological standards to evaluate professional attitudes in medical students, thus enabling a process of review for any interventions made in the curriculum. Therefore, we decided to validate its adaptation to the Spanish language in order to assess professionalism at the medical school level for Latin American students.

The results of this study showed that the instrument was easily understood and was applicable for the heterogeneous target population, which included medical students at basic and clinical levels. The reliability scale demonstrated good global internal consistency with a high Cronbach's alpha. However, the reliability of the subscales was not as good. The highest reliability was for the honesty and integrity factor, and the lowest, for the accountability domain; however, both were lower than 0.7. This finding could respond to intrinsic differences in the concept of professionalism between U.S. and Colombian culture, and the value assigned to each variable in each factor. In a multi-regional study, Chandratilake, *et al.* (14), identified differences in some items related to professionalism that could be explained by cultural, educative, geographical and health system variables. Table 1 shows that the original order defined by the instrument and built by consensus was not followed in the actual assessment. For example, the first factor, originally defined in the accountability domain, related to practicing evidence-based medicine. However, in this study, it was included in the fourth place, following teamwork, fair criticism and honest reporting of information. The same phenomenon occurred in other domains and should be seen as evidence of local beliefs regarding the concept of professionalism.

Following factorial analysis, we found four domains with different contents in each of them. We defined these domains as patient care, ethical attitude, partnership and relation with health systems. For patient care, items explored the relationship between physicians and patients, as well as physicians' role in guaranteeing the best possible clinical results. This domain included factors from different original domains such as duty, respect, altruism and enrichment. In the ethical attitude

domain, items related with physician honesty and self-accomplishment emerged, but included items from the respect, duty, equity and accountability original factors. In the partnership domain, items explored the relations with other physicians and the attitudes to deal with problems among colleagues, including items from the respect, honor, equity enrichment and accountability factors. Finally, the relation with the health system domain included only two items related to evidence-based medicine and equity that correspond to accountability and altruism original factors. The first three new domains, with different distributions and number of items, showed better reliability, except for the relation with the health system domain. As stated by Blackall, *et al.* (9), the original domains were chosen following the recommendation of the ABIM expert meeting. However, as they also mentioned in their discussion, "... data suggest that the original elements of professionalism proposed by the ABIM may not adequately reflect respondents' actual views of professionalism in medical education". These results show that although there is a theoretical construct of professionalism, opinions differ as to what that concept entails. Many items were included, but the way they were assembled represented the vision of students and did not necessarily concur with the domains as defined by the ABIM. In contrast with a philosophical definition of professionalism, the domains that appeared related more to a "working" definition with emphasis on the practical aspects of professional behavior in daily life.

Variables that assess empathy, compassion, respect for ethics code and self-improvement appeared highly significant when uniqueness was considered. Uniqueness indicates that a variable does not belong with any of the factors. We believe that the meaning of these concepts is very broad and that they were not easily understood by students, which made it difficult to include them in one of the selected domains. In addition, other researchers have developed specific instruments to measure constructs such as empathy and compassion (15-18), and, therefore, specific instruments should be used to explore these concepts when professionalism is assessed. Other concepts such as self-assessment (19) and self-improvement (20), that were imported from the quality management theory and are commonly used in health care administration, could not be seen by students as part of a professional behavior. Finally, other items such as professional appearance, participating in

academic meetings, respect for nature and offering of own experience could appear distant from the preconceived concept of professionalism (21).

In Colombia, there is little information about professional attitudes of medical students. Compared with other subjects as ethics and epidemiology, few universities have assessed these attitudes or included specific programs in order to develop and maintain professionalism during medical school years. The validation of this scale will help to describe these attitudes in the local setting, to propose curriculum changes and to measure it before and after introducing any initiative to improve professionalism. Besides, university hospitals can use this instrument as a tool to assess health personnel on the detection of weaknesses and the proposal of correctives in order to protect the health system from dehumanization, therapeutic obstinacy, commercial pressure and the prevailing of individual interest over community welfare.

In conclusion, as a global scale, the PSCOM can measure the attitudes of medical students regarding professionalism. However, the structure of the scale is different and should be carefully considered if the instrument is to be used in the Latin American medical student population.

Acknowledgements

We want to thank doctor George Blackall, Psy. D., MBA, for authorizing the use of The Penn State University College of Medicine (PSCOM) Professionalism Questionnaire and helping us in the back translation of the Spanish version.

Conflicts of interest

None.

Funding

The authors did not receive any external funding.

References

1. Morales-Ruiz J. Formación integral y profesionalismo médico: una propuesta de trabajo en el aula. Educ Med. 2009;12:73-82.
2. Quintana O. Los objetivos de la medicina. Rev Calidad Asistencial. 2003;18:132-5.
3. Wojtczak A. Profesionalismo médico: una problemática global. Educ Med. 2006;9:144-5.
4. Wynia MK, Latham SR, Kao AC, Berg JW, Emanuel LL. Medical professionalism in society. N Engl J Med. 1999;341:1612-6. <http://dx.doi.org/10.1056/NEJM199911183412112>
5. Swick HM, Szenas P, Danoff D, Whitcomb ME. Teaching professionalism in undergraduate medical education. JAMA. 1999;282:830-2. <http://dx.doi.org/10.1001/jama.282.9.830>.

6. **Swick HM.** Toward a normative definition of medical professionalism. Acad Med. 2000;75:612-6.
7. **American Board of Internal Medicine.** Project Professionalism. Fecha de consulta: 2 de marzo de 2014. Disponible en: <http://www.abimfoundation.org/Resource-Center/Bibliography/~media/Files/Resource%20Center/Project%20professionalism.ashx>.
8. **Ginsburg S, Regehr G, Hatala R, McNaughton N, Frohma A, Hodges B, et al.** Context, conflict, and resolution: A new conceptual framework for evaluating professionalism. Acad Med. 2000;75:S6-S11.
9. **Blackall GF, Melnick SA, Shoop GH, George J, Lerner SM, Wilson PK, et al.** Professionalism in medical education: The development and validation of a survey instrument to assess attitudes toward professionalism. Med Teach. 2007;29:e58-e62. <http://dx.doi.org/10.1080/01421590601044984>
10. **Batista-Foguet JM, Coenders G, Alonso J.** Confirmatory factor analysis. Its role on the validation of health related questionnaires. Med Clin (Barc). 2004;122(Suppl.1):21-7.
11. **Paez X.** El profesionalismo en medicina o la buena práctica. Rev Venez Endocrinol Metab. 2008;6:1.
12. **Young L, Baker P, Waller S, Hodgson L, Moor M.** Knowing your allies: Medical education and interprofessional exposure. J Interprof Care. 2007;21:155-63. <http://dx.doi.org/10.1080/13561820601176915>
13. **Goldie J.** Assessment of professionalism: A consolidation of current thinking. Med Teach. 2013;35:e952-6. <http://dx.doi.org/10.3109/0142159X.2012.714888>
14. **Chandratilake M, McAleer S, Gibson J.** Cultural similarities and differences in medical professionalism: A multi-region study. Med Educ. 2012;46:257-66. <http://dx.doi.org/10.1111/j.1365-2923.2011.04153.x>
15. **Magalhaes E, Costa P, Costa MJ.** Empathy of medical students and personality: Evidence from the Five-Factor Model. Med Teach. 2012;34:807-12. <http://dx.doi.org/10.3109/0142159X.2012.702248>
16. **Schantz ML.** Compassion: A concept analysis. Nurs Forum. 2007;42:48-55. <http://dx.doi.org/10.1111/j.1744-6198.2007.00067.x>
17. **van der Cingel M.** Compassion and professional care: Exploring the domain. Nurs Philos. 2009;10:124-36. <http://dx.doi.org/10.1111/j.1466-769X.2009.00397.x>
18. **Boon K, Turner J.** Ethical and professional conduct of medical students: Review of current assessment measures and controversies. J Med Ethics. 2004;30:221-6. <http://dx.doi.org/10.1136/jme.2002.002618>
19. **Stalmeijer RE, Dolmans DH, Wolfhagen IH, Peters WG, van CL, Scherpbier AJ.** Combined student ratings and self-assessment provide useful feedback for clinical teachers. Adv Health Sci Educ Theory Pract. 2010;15:315-28. <http://dx.doi.org/10.1007/s10459-009-9199-6>
20. **Damberg CL, Shortell SM, Raube K, Gillies RR, Rittenhouse D, McCurdy RK, et al.** Relationship between quality improvement processes and clinical performance. Am J Manag Care. 2010;16:601-6.
21. **Fischer RL, Hansen CE, Hunter RL, Veloski JJ.** Does physician attire influence patient satisfaction in an outpatient obstetrics and gynecology setting? Am J Obstet Gynecol. 2007;196:186-5. <http://dx.doi.org/10.1016/j.ajog.2006.09.043>

Annex

Spanish version of the PSCOM

Instrucciones

- | | |
|--------------------|---|
| Columna 1 | Lea cuidadosamente cada enunciado, piense cómo encaja dentro de su definición de profesionalismo y qué tan importante es para dicha definición. |
| Columna 2 | Encierre en un círculo la respuesta a cada enunciado que usted considera mejor refleja su definición de profesionalismo. |
| Utilice la escala: | Nunca - Poco - Algunas veces - Frecuentemente - Siempre |
| Columna 3 | Clasifique por orden de importancia los elementos de cada grupo del 1 al 6; por favor, utilice cada número solamente una vez. |
| Ejemplo: | Clasifique su comida favorita |

Grupo	Grado al cual considera que es buena la comida (encierre en un círculo su respuesta)					Clasificación
Brócoli	Nunca	Poco	Algunas veces	Frecuentemente	Siempre	4
Papa	Nunca	Poco	Algunas veces	Frecuentemente	Siempre	3
Perro caliente	Nunca	Poco	Algunas veces	Frecuentemente	Siempre	5
Pan	Nunca	Poco	Algunas veces	Frecuentemente	Siempre	2
Chocolate	Nunca	Poco	Algunas veces	Frecuentemente	Siempre	1
Zanahoria	Nunca	Poco	Algunas veces	Frecuentemente	Siempre	6

Ejemplo de clasificación por orden de importancia
Clasifique los elementos por orden de importancia del 1 al 6. Utilice el 1 para designar el de mayor importancia; utilice el 6 para designar el de menor importancia.
Ejemplo: El chocolate es mi comida 1; las zanahorias son las que menos me gustan. Utilice cada número sólo una vez.

Grupo 1	Grado al cual el enunciado refleja su definición (encierre en un círculo su respuesta)	Orden de importancia (1 al 6)
1. Mantiene los estándares científicos y basa sus decisiones en evidencia científica y experiencia.	Nunca - Poco - Algunas veces - Frecuentemente - Siempre	
2. Mantiene relaciones médico-paciente sin tratar de sacar provecho económico personal, de la privacidad o ventajas sexuales.	Nunca - Poco - Algunas veces - Frecuentemente - Siempre	
3. Se toma el tiempo para revisar el trabajo de sus colegas y suministrar comentarios y sugerencias significativas y constructivas para mejorarlo.	Nunca - Poco - Algunas veces - Frecuentemente - Siempre	
4. Busca mejoramiento personal.	Nunca - Poco - Algunas veces - Frecuentemente - Siempre	
5. Reporta información de manera consistente, precisa y honesta.	Nunca - Poco - Algunas veces - Frecuentemente - Siempre	
6. Evita hacer comentarios ofensivos y críticas indelicadas o injustas hacia otros compañeros.	Nunca - Poco - Algunas veces - Frecuentemente - Siempre	
Grupo 2		
1. Muestra interés en iniciar y ofrecer ayuda para el desarrollo profesional y personal de un colega.	Nunca - Poco - Algunas veces - Frecuentemente - Siempre	
2. Promueve el bienestar y desarrollo del profesorado joven.	Nunca - Poco - Algunas veces - Frecuentemente - Siempre	
3. Se rehúsa a violar su propio código de conducta personal y profesional.	Nunca - Poco - Algunas veces - Frecuentemente - Siempre	
4. Aprecia y respeta la naturaleza diversa de los sujetos de investigación o pacientes y honra dichas diferencias en su trabajo.	Nunca - Poco - Algunas veces - Frecuentemente - Siempre	
5. Asiste a las reuniones de la facultad, a seminarios y presentaciones de las investigaciones de los estudiantes como demostración de apoyo.	Nunca - Poco - Algunas veces - Frecuentemente - Siempre	
6. Trabaja respetuosamente en colaboración con el equipo en beneficio de proveer un mejor cuidado del paciente o como contribución a la investigación.	Nunca - Poco - Algunas veces - Frecuentemente - Siempre	
Grupo 3		
1. Participa en procesos de acción correctiva en contra de aquellos que incumplen con los estándares de conducta profesional.	Nunca - Poco - Algunas veces - Frecuentemente - Siempre	
2. No busca avanzar en su carrera a costa de otros.	Nunca - Poco - Algunas veces - Frecuentemente - Siempre	
3. Ofrece voluntariamente su experiencia y habilidades para el bienestar de la comunidad.	Nunca - Poco - Algunas veces - Frecuentemente - Siempre	
4. Cumple con sus obligaciones y compromisos de manera seria.	Nunca - Poco - Algunas veces - Frecuentemente - Siempre	
5. Respeta los derechos, la individualidad y diversidad de pensamiento de colegas y estudiantes.	Nunca - Poco - Algunas veces - Frecuentemente - Siempre	
6. Contribuye significativamente a la misión de enseñanza del departamento y la Escuela de Medicina.	Nunca - Poco - Algunas veces - Frecuentemente - Siempre	
Grupo 4		
1. Manifiesta compasión.	Nunca - Poco - Algunas veces - Frecuentemente - Siempre	
2. Demuestra adaptabilidad al responder a necesidades y prioridades cambiantes.	Nunca - Poco - Algunas veces - Frecuentemente - Siempre	
3. Promueve la justicia dentro del sistema de salud demostrando su esfuerzo por eliminar la discriminación dentro del mismo.	Nunca - Poco - Algunas veces - Frecuentemente - Siempre	
4. Respeta la autonomía de los pacientes y les ayuda a tomar decisiones informadas.	Nunca - Poco - Algunas veces - Frecuentemente - Siempre	
5. Asume el liderazgo en el manejo de pacientes.	Nunca - Poco - Algunas veces - Frecuentemente - Siempre	
6. Reconoce sus propias limitaciones.	Nunca - Poco - Algunas veces - Frecuentemente - Siempre	

Grupo 5	Grado al cual el enunciado refleja su definición (encierre en un círculo su respuesta)	Orden de importancia (1 al 6)
1. Asume su propia responsabilidad personal en la toma de decisiones sobre el cuidado del paciente.	Nunca - Poco - Algunas veces - Frecuentemente - Siempre	
2. Participa en actividades enfocadas a lograr una excelencia en el cuidado de los pacientes.	Nunca - Poco - Algunas veces - Frecuentemente - Siempre	
3. Informa sobre errores médicos o de investigación.	Nunca - Poco - Algunas veces - Frecuentemente - Siempre	
4. Su comportamiento demuestra un compromiso hacia la confidencialidad.	Nunca - Poco - Algunas veces - Frecuentemente - Siempre	
5. Adopta estándares uniformes y equitativos hacia el cuidado de los pacientes.	Nunca - Poco - Algunas veces - Frecuentemente - Siempre	
6. Demuestra empatía.	Nunca - Poco - Algunas veces - Frecuentemente - Siempre	
Grupo 6		
1. Defiende los intereses del paciente o sujeto de investigación por encima del interés personal.	Nunca - Poco - Algunas veces - Frecuentemente - Siempre	
2. Divulga los conflictos de interés en el desarrollo de los deberes y actividades profesionales.	Nunca - Poco - Algunas veces - Frecuentemente - Siempre	
3. Se viste de manera profesional y respetuosa hacia los demás.	Nunca - Poco - Algunas veces - Frecuentemente - Siempre	
4. Responde a la crítica constructiva buscando mejorar sus capacidades en el área criticada.	Nunca - Poco - Algunas veces - Frecuentemente - Siempre	
5. Está comprometido en la implementación de un cuidado rentable del paciente.	Nunca - Poco - Algunas veces - Frecuentemente - Siempre	
6. Presenta la información y actúa honestamente.	Nunca - Poco - Algunas veces - Frecuentemente - Siempre	

Este instrumento es una adaptación al idioma español del cuestionario sobre profesionalismo de la *Office of Medical Education H176, The Penn State College of Medicine*, Box 850, Hershey, PA 17033. © 2003 Todos los derechos reservados